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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,163	10/23/2003	Reiner Eschbach	D/A2327	1667

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EXAMINER

ABEL JALIL, NEVEEN

ART UNIT	PAPER NUMBER
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2165

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/693,163

Applicant(s)

ESCHBACH ET AL.

Examiner

Neveen Abel-Jalil

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Remarks

1. The Amendment filed on January 3, 2007 has been received and entered. Claim 37 is pending.
2. Applicant's Amendment has overcome the rejection under 35 USC 112, second paragraph, and claim objections.

Claim Objections

3. Claim 37 is objected to because of the following informalities:

In claim 37, line 26, the recitation of "such that" constitute intended use does actually having to take place. Claim should recite more direct and definite such as "wherein" or "which". Appropriate correction is required.

In claim 37, line 29, there appears to be a missing coma (" , ") after primary keywords. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 37 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 37, line 3, recite “associating *one* or more keywords” which indicates an minimum of only “*one*” is acceptable; however, in line 6 of the same claim, it appears to be a requirement to have at least keywords associated with the same image. Correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claim 37 is rejected under 35 U.S.C. 102(e) as being anticipated by Kinjo (U.S. Pub. No. 2003/0193582 A1).

As to claim 37, Kinjo discloses a method comprising:

obtaining one stored images wherein the one or more stored images are stored within an image database, wherein the stored images are associated with at least one of one or more keywords, wherein a multitude of keyword statistics are stored in a database statistics module, and wherein the keyword statistics indicate a probability that one of the keywords and another one of the keywords are both associated with the same stored image (See Figure 4, shows two or more keywords associated with an image, also see page 1, paragraphs 0010-0013);

obtaining an image and comparing the image to the stored images to identify one or more similar images wherein image similarity is based on at least two factors, wherein one of the at

least two factors is closeness in time of image acquisition and wherein another one of the at least two factors is determined using a content based image retrieval module (See page 8, paragraphs 0146-0148, and see page 10, paragraph 0167);

producing at least two primary keywords based on the keywords associated with the similar images (See Figure 4, and see page 2, paragraph 0030);

determining at least two primary likelihoods associated with the primary keywords (See page 1, paragraph 0008, and see page 4, paragraph 0070);

producing at least two secondary likelihoods that identify at least two finer scale keywords wherein the secondary likelihoods are based on the keyword statistics and the primary likelihoods such that the finer scale keywords are keywords that are likely to occur in association with at least one of the primary keywords (See page 11, paragraph 0187, also see page 4, paragraphs 0072-0073);

presenting the primary keywords the finer scale keywords, and a new keyword selection to a user (See page 10, paragraphs 0181-0183, and see page 11, paragraph 0200);

obtaining one or more accepted keywords from the user wherein the accepted keywords comprise any one of or combination of primary keywords, the finer scale keywords, and one or more new keywords entered via the new keyword selection (See page 11, paragraphs 0186-0190); and

storing the image within the image database and in association with the accepted keywords (See page 4, paragraph 0072); and

updating the keyword statistics wherein the keywords further comprise the accepted keywords.

Although, the Examiner maintains the rejection above in that Kinjo teaches still teaches association between two keywords attached the same image (See Kinjo page 11, paragraph 0187). To further expedite prosecution, an alternative rejection is presented below wherein Kinjo is modified with Parulski et al. to teach this limitaion more explicitly.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kinjo (U.S. Pub. No. 2003/0193582 A1) in view of Parulski et al. (U.S. Patent No. 6,629,104 B1).

As to claim 37, Kinjo discloses a method comprising:

obtaining one stored images wherein the one or more stored images are stored within an image database, wherein the stored images are associated with at least one of one or more keywords, wherein a multitude of keyword statistics are stored in a database statistics module, and wherein the keyword statistics indicate a probability that one of the keywords and another one of the keywords are both associated with the same stored image (See Figure 4, shows two or more keywords associated with an image, also see page 1, paragraphs 0010-0013);

obtaining an image and comparing the image to the stored images to identify one or more similar images wherein image similarity is based on at least two factors, wherein one of the at least two factors is closeness in time of image acquisition and wherein another one of the at least two factors is determined using a content based image retrieval module (See page 8, paragraphs 0146-0148, and see page 10, paragraph 0167);

producing at least two primary keywords based on the keywords associated with the similar images (See Figure 4, and see page 2, paragraph 0030);

determining at least two primary likelihoods associated with the primary keywords (See page 1, paragraph 0008, and see page 4, paragraph 0070);

presenting the primary keywords the finer scale keywords, and a new keyword selection to a user (See page 10, paragraphs 0181-0183, and see page 11, paragraph 0200);

obtaining one or more accepted keywords from the user wherein the accepted keywords comprise any one of or combination of primary keywords, the finer scale keywords, and one or more new keywords entered via the new keyword selection (See page 11, paragraphs 0186-0190); and

storing the image within the image database and in association with the accepted keywords (See page 4, paragraph 0072); and

updating the keyword statistics wherein the keywords further comprise the accepted keywords.

Kinjo teaches the claimed invention but does not explicitly teach association between two keywords attached the same image being of the same type (See Kinjo page 11, paragraph 0187)

Parulski et al. teaches producing at least two secondary likelihoods that identify at least two finer scale keywords wherein the secondary likelihoods are based on the keyword statistics and the primary likelihoods such that the finer scale keywords are keywords that are likely to occur in association with at least one of the primary keywords (See Parulski et al. column 6, lines 54-63, and see Parulski et al. column 7, lines 1-18, and see Figure 4).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Kinjo with the teachings of Parulski et al. to include association of multiple keywords in the same category (i.e. finer scale) as it allows for faster classification of images as taught in Parulski et al. column 2, lines 19-20.

Response to Arguments

10. Applicant's arguments with respect to claim 37 have been considered but are moot in view of the new ground(s) of rejection.

In response to applicant's argument that "both fine scale keywords and primary keywords are keywords that can be nouns, adjectives, or other grammatical elements, Kinjo's invention uses an image to identify nouns and uses the nouns to suggest adjectives but does not obtain adjectives and use them to suggest nouns" is acknowledged but not deemed to be persuasive.

The Examiner contends that such language is not stated in the claim. Kinjo does indeed teach multiple keywords (See paragraph 0147) and just as pointed out by the applicant's they can be of any form (noun, adjective, etc.) if a distinction is required then it should be stated in the claim as such.

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Applicant argues that his “finer scale keywords” are distinct from Kinjo’s two different types of keywords (types and sensitivity which are kept separately); the Examiner points out that there is no indication in the claims as to having the primary and finer scale keywords as being of “same” type and/or “treated similarly” if this is an essential distinction of applicant’s invention. Then it should be recited in the claim as such.

In response to applicant’s argument that “Kinjo’s does not hint or suggest examining keyword statistics within a class (keyword -> keyword)” is acknowledged but not deemed to be persuasive.

There’s no language in the claim to that effect. Its unclear how this distinction is made in the claim what is claimed is “association” not a “collection or similarity” score. Perhaps a recitation directed to defining what those keyword statistics are is needed (i.e. keyword occurrence score or combined association score).

In response to applicant’s argument that “Kinjo’s does not teach or suggest keyword statistics” is acknowledged but not deemed to be persuasive.

Kinjo’s in paragraph 0140 teaches maintain and assigning scores to subject area which is a form of statistics being calculated.

Conclusion

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11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Khosla et al. (U.S. Patent No. 6,202,061 B1) teaches creating collection of media and selecting keywords related to images.

Kaburagi et al. (U.S. Pub. No. 2003/0074373 A1) teaches sorting image data according to date and time.

Shiota et al. (U.S. Pub. No. 2004/0064339 A1) teaches generating online albums.

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13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neveen Abel-Jalil whose telephone number is 571-272-4074.

The examiner can normally be reached on 8:30AM-5:30PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Gaffin can be reached on 571-272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Neveen Abel-Jalil
April 2, 2007